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ABSTRACT

Providing an account of black employment in the private sector between 1969 and 1975, the objectives of this study were designed to develop statistical models for estimating the employment gap between black employment experiences and black employment expectations; projecting employment gap closures; estimating the economic impact of employment discrimination upon blacks; explaining the employment patterns of blacks; and comparing the available pool of black labor with the total demand for labor. All data were collected from the Equal Employment Opportunity (EEO-1) Employer Information Reports. The principal findings were the existence of an employment gap in all six job categories included in this study; some improvement in the overall posture of black workers, although limited; continued existence of gaps between the earnings of black and white workers; an increase in the economic impact of employment discrimination; a favorable impact on the changes in black participation rates brought about by the enforcement of Title VII of the Civil Rights Act of 1964; and more stringent educational requirements for blacks over whites when competing for jobs. The study concluded that if given equal opportunity for employment, there are enough blacks with the educational requirements to close the employment gap; however, even with continued increases in black employment availability and participation rates, it will be the twenty-first century before the employment gaps will close. (Statistical tables are included in the document.) (BM)

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BLACK EXPERIENCES VERSUS BLACK EXPECTATIONS
(A Case for Fair-Share Employment)

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INTRODUCTION

This is a study of black employment in the private sector as reported by those employers who are required to and did file EEO-1 Employer Information Reports to the Equal Employment Opportunity Commission.* A major purpose of this study is to measure the penetration and occupational position of blacks in the EEO-1 universe since 1969 and determine how the relative status of blacks has changed over the past five years. A second purpose is to estimate black employment gaps that exist when black experiences in the workforce are measured against black expectations based upon fair-share employment levels. A third purpose is to calculate the economic loss to black workers which is associated with employment discrimination. A fourth purpose is to project the time when employment gaps will close.

This paper is based upon the general proposition that black workers are entitled to a fair share of gainful employment and that the attainment of that fair share is a desirable social and economic national goal of the highest priority. We assume that a fair share constitutes a minimum level of employment and that employment at any lower level is the result of systemic discrimination. This implies that without systemic discriminatory influences in the market place, the level of black employment would equal the fair-share level. By the same token we reject the traditional arguments that imperfections in the labor market, such as labor immobility, account for any significant difference between fair-share employment and actual employment. To the extent that imperfections exist we hold they are man-made and therefore do not represent natural barriers to fair-share employment. It should be understood, however, that the attainment of fair-share employment on a broad job category basis does not connote that blacks have obtained an equitable share of positions in every occupation and job title in the job category. Nor does it purport that individual members of the black labor force would not face problems of job denial or employment discrimination.

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* All employers subject to Title VII of the Civil Rights Act of 1969 (amended 1972) who have 100 or more employees either in and of themselves or as part of an enterprise are required by law to file the Employer Information Report EEO-1. Federal contractors are required to file the report under other authorizations.

An assumption is made regarding availability of blacks to fill demand under conditions of equal employment opportunity. We assume there exist in the market place a sufficient pool of blacks, like whites, who are qualified or qualifiable for entry level positions or higher levels, in many of the occupations included under the broad job categories listed on the EEO-1 Reports. Furthermore, it is held that the number of blacks in this pool are more than adequate to meet the labor requirements to raise black employment to a fair-share level. Therefore, any level of black employment below the fair-share level is the product of institutional employment practices and procedures which exclude blacks from the workforce and from certain job assignments. Contrary to current acceptable positions, we hold to the basic belief that employment discrimination arising from this systematism is intentional and represents the wherewithal by which employers achieve the objectives of denying fair-share employment to blacks.

Although there are other premises for equal employment, the fair-share concept and the availability of black labor provide the analytical framework for this study.

While this study deals solely with the black experience, the concepts and methodologies applied herein can be used for studies of other groups, either on a race/ethnic and/or sex basis.

The objectives of this study are:

1. Develop statistical model(s) for estimating the employment gap between black employment experiences and black employment expectations.

2. Develop statistical model(s) for projecting employment gap closures.

3. Develop statistical model(s) for estimating the economic impact of employment discrimination upon black labor force.

4. Develop statistical model(s) for use in explaining the employment patterns of blacks.

5. Develop statistical model(s) for comparing the available pool of black labor with the total demand for labor.

6. Provide an account of black employment between 1969 and 1975 in the private sector.

All of the models assume that blacks are entitled to a fair share of employment. An equitable fair-share level of employment means that black participation rates in broad job categories would be no less than their employment availability rates. If the participation rate in any broad job category is less than the employment availability rate then an employment percent gap would exist. Conversely, if the participation rate in any given broad job category is equal to or greater than the employment availability rate then no employment percent gap would exist. The employment percent gap represents the difference between black employment expectation (employment availability rate) at a fair-share level and black employment experiences (participation rate) at labor market levels of black employment. The employment percent gap indicates the percentage points by which black participation in a given job category must be increased to achieve equality with the employment availability rate.

Equality of employment means that black occupational distribution within a given job category is equal to the relative job mix of whites. However, the concept of equality of occupation distribution does not incorporate the quantity concept of fair-share employment, but simply the quality, or job mix, of actual black employment. A ratio of the percent of all blacks employed in a given job category to percent of all whites employed in the same job category is used to indicate the occupational position of blacks relative to whites, but exclusive of the effects of less than fair-share employment levels. The difference between 1 and the ratio provides an index of occupational gap. The index of occupational gap by job category shows the relative deficiency in the utilization of blacks over time. On the other hand, the index provides a method for observing any improvements in the occupational standing of blacks.

The economic loss attributed to employment discrimination against the black labor force is obtained through the construction of an index of wage gap. This index is similar to the index of occupational gap, except that it refers to earning discrepancies rather than differences in occupational distributions. The annual median earnings of blacks and whites, respectively, is given in thousands of dollars

for each of the specified job categories and by year. The index of wage gap, which is defined as the ratio of the differences in black earnings to white earnings, is used as a method for determining the relative deficiency in black wages. Likewise, the index will show any movements in the relative earnings position of blacks.

The earnings position of blacks relative to whites are used to estimate the wage bill data in the wage bill model. The wage bill gap model is treated in three components: (1) total; (2) fair-share employment, and (3) median wages equal to whites. The wage loss models show not only the various wage bills which blacks receive and expect, but in addition, provide an indication of the relative importance of employment, job assignment, and wages upon the earnings position of blacks.

Regression models are used to determine the relationship between black employment patterns and several explanatory variables. Because the regression models are based upon at most six observations, the resulting limited degrees of freedom restrict the evaluation of significance of the statistics by comparison with probability distribution. The regression model is presumed to be significant if at least 50 percent of the variation in the dependent variable is "explained" by the variation in the independent variable.

Finally, regression models are used to estimate the number of years it will take blacks to achieve fair-share employment. The time series estimates are projected on the basis of: (1) the employment level; (2) the participation rates; and (3) the percent employment gap.

EMPLOYMENT GAP

The employment gap, which represents the difference between black expectations at a fair-share level of employment and black experiences in the labor market, may be measured from several perspectives. One measures the difference between black employment availability rates and black participation rates. This difference is called the percent employment gap. The second measures the difference between fair-share employment levels and actual employment levels. The difference is called the level of employment gap. The third measures the differences between the relative occupational patterns of blacks and whites. This relative disparity is called the index of occupational gap. We shall proceed to examine each of the gaps in the order listed herein.

Percent Employment Gap

The percent employment gap is found by noting the differences between black employment availability rates and black participation rates. The data in Tables 1-6 provide the basis of our analysis.1/

In 1969, black participation rates in the selected job categories were as follows: officials and managers (1.5%); professional (2.1%); technicians (5.6%); sales workers (4.0%); office and clerical (6.1%); and craftworkers (5.0%). Since these participation rates were below the employment availability rate of 10.2 percent, employment gaps existed for each selected job category. More specifically, the employment gaps in percentage points were: 8.7 for officials and managers; 8.1 for professionals; 5.6 for technicians; 6.2 for sales workers; 4.1 for office and clerical; and 5.2 for craftworkers. The existence of an employment gap for each of the job categories leads one to the conclusion that black participation was adversely affected by systemic features of employment practices in the hiring and selection of black workers.

1/ All tables are in Appendix I.

By 1974, black participation rates were as follows: officials and managers (2.9%); professionals (3.1%); technicians (7.3%); sales workers (5.5%); office and clerical (8.8%); and craftworkers (7.0%).

With an employment availability rate of 10.7 percent and participation rates falling below that point, one finds that employment gaps still existed in 1974; officials and managers (7.8); professionals (7.6); technicians (3.4); sales workers (5.2); office and clerical (1.9); and craftworkers (3.7). While increases in participation rates and decreases in employment gaps do suggest that some modifications were made in the employment practices of EEO-1 employers, the existence of an employment gap still implies that black workers as a class were adversely affected by systemic discrimination.

The extent, if any, of modifications in employment practices upon black workers can be shown by finding the percentage point changes in participation rates for any given job category over any given time period. Between 1969 and 1974 black participation rates increased as follows: officials and managers, 1.4 percentage points; professionals, 1.0 percentage points; technicians, 1.7 percentage points; sales workers, 1.5 percentage points; office and clerical workers, 2.7 percentage points; and craft workers, 2.0 percentage points. On the basis of these changes one may easily conclude, without any reservations, that the rate of progress by which blacks are advancing on the job front is miniscule. It is even more miniscule when one annualizes the percentage point increases. On an annual basis, the black participation rates increased as follows: 0.2 percentage points for professional jobs; 0.3 percentage points for officials and managers; technicians, and sales workers; 0.4 percentage points for craft workers, and 0.5 percentage points for office and clerical workers. Certainly, no one committed to the cause of equal employment would view these changes as evidence of moderate progress by blacks. At the most they represent a microscopic reflection of black tokenism found in other aspects of American life.

Level of Black Employment

Comparisons of actual and fair-share employment levels will permit us to analyze and estimate the numerical level of employment gaps for each of the selected job categories (Tables 7-14). These tables present, for each year,

employment data, in thousands, from the EEO-1 Reports on selected job categories, as well as the total of these job categories. Data in column 2 of each table show the total employment for all racial groups while data in column 3 show the actual employment of blacks and data in column 4 show the fair-share employment of blacks. Fair-share level of employment is defined as the product of total employment and black employment availability rates. As such, it represents the level of black employment under labor market conditions of equal employment opportunity, no systemic discrimination, and hiring conditions commensurate with the pool of black labor available, qualified or qualifiable for work.

The level of employment gap, as shown in column 5, is the difference between actual and fair-share employment levels. This difference represents the amount by which black employment must be increased to achieve an employment level representative of black employment potential and availability.

In 1969, black employment in all selected job categories was 1.03 million below the fair-share level (Table 7). Between 1969 and 1974, the level of employment gap fluctuated in irregular patterns declining in 1974 to 945 thousand which was below the gap of 1969 but above the gap level of 1970.

During the period 1969 to 1974, black employment increased by one-half million while total employment increased over 3.1 million. During the same period, black expectation (fair-share employment) rose by 425 thousand. Black employment increased faster than fair-share employment projections and thus the level of employment gap fell by 81 thousand. This improvement in the overall employment posture of black workers and the reduction in the level of employment gap may be partially explained by the vigorous enforcement of Title VII by the Equal Employment Opportunity Commission and court actions filed by the Commission since 1972. The full impact of enforcement powers of the Commission, however, cannot be gauged in such a limited time span.

While there were marked improvements in the level of black employment and a reduction in the overall level of employment gap, the results were not uniform among the individual job categories. In 1969, the level of black employment as officials and managers was only 38 thousand

out of 2.5 million so employed in the job category(Table 8). Based on fair-share employment, black employment potential in the job category was 263 thousand. Thus, black employment was 225 thousand less than the fair-share level. This gap widened in each succeeding year except 1970. By 1974, black employment was 99 thousand out of a total of 3.4 million. Application of the black availability rate to the total employment in the job category would have placed black employment at 368 thousand which is 269 thousand more than actual employment of blacks.

The data in Table 8 show that black employment increased by 61 thousand for the period 1969-1974 while total employment increased 864 thousand. On the other hand, the fair-share level rose by 105 thousand which was 44 thousand above the actual level. Apparently black employment in this job category did not keep pace with black employment potential based upon the employment availability rate.

In 1969, blacks accounted for only 50 thousand of all professional employment (Table 9). A fair-share level of the 2.4 million total employed in the job category would have raised black employment to 240 thousand. The difference between the level of black employment (50 thousand) and the fair-share level (240 thousand) indicates that the level of employment gap stood at 190 thousand. As total employment increased in the job category for each year in the series, black employment also rose. Black employment stood at 78 thousand out of a total of 2.5 million in 1974; the level of employment gap was 189 thousand. For the period, there was a net gain of 27 thousand jobs for black workers out of an overall increase of 143 thousand professional jobs. Because the fair-share change (27 thousand) was less than the actual employment change (28 thousand) the level of the gap decreased by only one thousand. It would appear that black employment in professional jobs has almost stabilized since the level of employment gap did not materially change between 1969 and 1974.

The data for analyzing changes in the technician job category is given in Table 10. Here, one finds that in 1969, blacks accounted for only 70 thousand of approximately 1.2 million persons employed. If black employment had been at fair-share level, it would have stood at 127 thousand; hence, a level of employment gap of 57 thousand. As total employment first went up between 1969 and 1972 and downward in 1973, black employment continued to rise until 1974 when

it was 110 thousand out of 1.5 million employed. A fair-share level would have put the figure at 162 thousand; therefore a level of employment gap of 52 thousand by 1974. For the period 1969-1974, total employment increased around 263 thousand; black employment by some 40 thousand. Since the fair-share change (35 thousand) was smaller than the increase in actual employment (40 thousand), the level of employment gap declined by five thousand. Improvements in the employment position of blacks in this job category appear to have been moving faster than increases in the availability rates of blacks.

Table 11 affords us an opportunity to review the employment of blacks in office and clerical jobs. In 1969, blacks accounted for 309 thousand of 5.0 million persons so employed. However, according to the fair-share concept, the black employment level should have been 513 thousand; therefore, the level of employment gap stood at 204 thousand. Black employment increased in most of the years between 1969 and 1974. By 1974, black employment was 479 thousand out of a total of 5.4 million. With a fair-share projection of 578 thousand, the level of employment gap was 99 thousand. Thus, for the period, while overall employment increased by 368 thousand, black employment expanded by 170 thousand. Since blacks' fair-share level increased by only 65 thousand the level of employment gap fell by 105 thousand. One may conclude that black progress in the job category exhibited significant improvement over the period and perhaps the time is approaching when black employment experiences in the job category will be equal to black employment expectations.

While the level of employment gap was decreasing for office and clerical worker jobs, the reverse was occurring in the sales workers category. Out of a total 2.5 million persons employed in the job category in 1969, approximately 100 thousand were black (Table 12). According to the fair-share rule, black employment should have been 256 thousand; thus the level of employment gap was 156 thousand. By 1974, total employment in the job category was more than 3.2 million of which approximately 180 thousand were black. Attainment of a fair-share level would have put black employment at 348 thousand; instead the level of employment gap was 168 thousand.

While the total employment changed overall by approximately 750 thousand, black employment only increased by 80 thousand which was less than the increase in black availability (92 thousand). Thus, the level of employment gap went up by 12 thousand between 1969 and 1974. From the data shown in Table 12, it would appear that black employment in the job category has improved but improvements in employment have not kept pace with an expanding supply of black labor.

Table 13 gives the data for the craft workers category. As seen from the table, black employment in 1969 was approximately 197 thousand out of 3.9 million while the fair-share employment level was 404 thousand. Thus, black workers were underrepresented by some 207 thousand. Between 1969 and 1974, total employment gradually increased to over 4.4 million with black employment rising to around 308 thousand. Because black availability rates were also increasing during the same period, the fair-share projections went up to 472 thousand. Because of the difference between actual and fair-share level of employment in 1974, the level of employment gap was 164 thousand. Over the period, total employment increased by 454 thousand, while black employment exhibited an increase of 111 thousand. Since this overall increase in black employment was greater than the increase in the fair-share level (68 thousand), the level of employment gap fell by 43 thousand.

The level of employment gaps, like the employment percentage gaps, clearly demonstrate the magnitude of black underrepresentation in the EEO-1 workforce. If the assumptions regarding the black labor potential are valid, and we maintain they are valid, then the existence of these gaps would imply that racial discrimination strongly influences employment decisions in this country.

Index of Occupation Gap

The utilization of black workers can be shown by analyzing the occupational distribution of black employment. Comparisons between black utilization and white utilization will reveal the disparity, if any, between the treatment accorded both groups. Before proceeding, it should be pointed out, however, that the percentage occupational distribution of black employment does not incorporate the concept of fair-share employment, but simply reveals the job-mix of actual employment.

The data in Tables 14-19 provide the bases for our analysis of the utilization of black workers. In each table, the occupational distributions of black and white workers are given in columns 2 and 3 respectively. These distributions tell us what percentage of the group's total employment is found in given job categories. The ratio of percent of all black workers to white workers in column 4 shows the relative occupational position of black workers as compared to white workers. The ratio is found by dividing the occupational distribution of black workers in a given job category by that of white workers. The relative occupational positions of black workers yielded by these ratios show the effects of partisan employment decisions upon the quality of black employment.

An index of occupational gap is shown in column 5 of each table. This index measures the disparity between black and white utilization and indicates the extent to which black workers are underrepresented, as compared to white workers, because of differential occupational distribution. The indices provide a mechanism for evaluating any changes in the relative position of black workers and in the degree of disparity between the utilization of both groups.

In 1969, the occupational distributions of the black workforce were as follows: officials and managers (1.4%); professionals (1.8%); technicians (2.5%); sales workers (3.6%); office and clerical (11.3%); and craftworkers (7.2%). For white workers the occupational distributions were: officials and managers (10.0%); professionals (8.9%); technicians (4.5%); sales workers (9.4%); office and clerical (18.3%); and craft workers (14.5%).

Surely, no one will question the fact that there were differences between the utilization rates by occupational patterns of black and white workers and the differences appear to be significant. The significance can be determined by looking at the occupational positions of black workers relative to whites in 1969. They were as follows: 14% for officials and managers; 20% for professionals; 56% for technicians; 38% for sales workers; 62% for office and clerical; and almost 50% for craft workers. Approximately 65 percent of all white employment was found in these selected job categories compared to only 28 percent of all black employment. Almost 72 percent of all black employment was concentrated in other job categories compared

to only 38 percent of all white employment.[2/] If we assume that the occupational distribution of white employment stands as proxy for the normative patterns, then the under-utilization of black employment becomes more apparent. This inequality of treatment between black and white workers could not have happened by mere chance; it had to be the result of deliberate employment decisions designed to limit the penetration of blacks into the selected job categories.

This disparity between the utilization of black versus white employment is further demonstrated by using the index of occupational gap to measure the occupational placement deficiency of black workers. The index for each of the job categories shows that black workers were under-utilized when compared to white workers. For example, the index for black officials and managers stood at 86 percent. This means that black utilization in the job category was deficient by 86 percent when compared to the normative occupational distribution in this category for white workers. Black occupational deficiencies in the other selected job categories were: 80 percent for professionals; 44 percent for technicians; 62 percent for sales workers; 38 percent for office and clerical; and 50 percent for craft workers. It is doubtful if such occupational deficiencies could have occurred through the process of randomly selecting employees from a common labor pool. It is more reasonable to assume that they were the results of employment decisions designed to achieve token quotas for black employment in selected job categories.

Between 1969 and 1974, the occupational distribution of black workers and their relative job positions improved. For example, nearly 2.7 percent of all black workers in 1974 were employed as officials and managers as compared to 1.4 percent in 1969. Black occupational distribution in other job categories improved as follows: professional (1.8% to 2.1%); technician (2.5% to 3.0%); sales workers (3.6% to $.9%); office and clerical (11.3% to 13.0%); and craft workers (7.2% to 8.4%). The overall improvement in the utilization of black workers in these job categories

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2/ The remaining three job categories in the EEO-1 survey--operatives, laborers, and service/maintenance workers--have been excluded from this study because blacks in these categories have reached or exceeded their fair-share level.

amounts to only four percentage points for the five-year period (28 percent to 32 percent) while the occupational distribution for white employment remained approximately 65 percent. In spite of the apparent improvements in the occupational mix of black employment, black workers were still grossly underrepresented when compared to the normative occupational distributions of the workforce.

Since the occupational distributions of black employment improved while the normative white patterns remained almost unchanged, the relative occupational position of blacks increased as follows: officials and managers (14% to 24%); professionals (20% to 26%); technicians (56% to 64%); sales workers (38% to 47%); office and clerical (62% to 79%); and craft workers (50% to 61%). While it is rather difficult to attribute these improvements to any one factor, we should not discount the probable impact of Title VII and the growing awareness on the part of employers that blatant violations of the Title VII can and do result in monetary costs to employers found guilty of violating the law. As token as the changes may be, they do demonstrate that employers were conscious about Title VII and were willing to make some accommodations. Whatever the reasons, it is doubtful if changes of these dimensions would have occurred otherwise.

Analyses of the indicies of occupational gaps revealed that black under-utilization decreased by 1974 as follows: officials and managers (10 percentage points); professionals (6 percentage points); technicians (8 percentage points); sales workers (9 percentage points); and craft workers (11 percentage points). Despite these decreases, black utilization when compared with white utilization remained deficient as follows: officials and managers (76%); professionals (74%); technicians (36%); sales workers (53%); office and clerical (21%); and craft workers (39%).

In summary, the progress during the past five years indicates that equality of utilization for black America is locked in the distant future and may be as elusive as that butterfly on the window.

EARNINGS POSITION OF BLACK WORKERS

Index of Wage Gap

So far we have focused on the level and quality of black employment between 1969 and 1974. Now, we shall look at the annual earnings of black and white workers in selected job categories for the same time period. More specifically, we want to determine if the earnings of black workers kept pace with those of white workers and ascertain if the relative earnings position between the two groups changed during the 1969 to 1974 period.

We shall assume that black and white workers receive the same pay for the same work, or equal pay for equal work. If the occupational distribution of black workers were equal to that of white workers, any earning differential would be due to differences in seniority or tenure, (i.e., where one moves upward on the wage scale over a period of time until a maximum is reached). For example, if a black worker is an assistant manager I, with two years of service and the wage scale calls for an annual wage of $11,000, and a white worker with the same job title has five years of service and the wage scale calls for an annual of $14,500, then the wage differential of $3,500 would be a function of length of service. On the other hand, suppose that blacks were given the opportunity to become assistant managers only two years ago; the wage differential would be tantamount to present effects of past discrimination. What we are saying is that regardless of seniority or tenure, wage differentials are the direct result of discriminatory employment practices and cannot be explained except in the context of job discrimination, past or present.

The data in Tables 20-24 provide the basis for our analysis.3/ According to the data, the annual median earnings of blacks and whites increased during the years 1969 to 1974. The earnings of whites increased faster than those of blacks in the officials and managers, and professional and technicians job categories. The earnings of blacks increased faster than those of whites in the office and clerical, and sales workers job categories. The earnings of both groups increased about the same in the craft workers job category.

3/ These tables present estimated data on the annual median earnings of blacks and whites by year for selected job categories. The data are based upon estimates of median weekly earnings inflated to cover the entire year, for payroll workers derived from the May CPS. Because of the limited size of the monthly CPS, occupational earnings data for blacks includes, in addition to blacks, all other non-whites. Nevertheless, blacks comprise most of the non-white group so any measurement biases caused by the inclusion of these additional groups is probably insignificant.

In each table, the annual median earnings of black and white workers, in thousands of dollars, are given in columns 2 and 3 respectively. Column 4 of the tables show the wage gap which represents the dollar differential between the annual median earnings of black and white workers. Column 5 of the tables provide the index of wage gap, which is defined as the ratio of the difference in black and white earnings. It is calculated as follows: $\frac{W-B}{W} \times 100$. The index is the same as the index of occupational gap given in column 5 of tables 14-19, except of course, it refers to earning discrepancies rather than differences in occupational distributions.

Since the data in these tables are derived from only one month of the CPS, differences in earning in the various job categories by year as well as by blacks and whites may be subject to considerable sampling error. Nevertheless, the earnings data of these tables do indicate the earning position of blacks relative to whites and thus will be used to estimate the wage bill data provided in Tables 25-31.

The wage gap, which is the dollar differential between white and black annual median earnings, increased in all job categories, except in the office and clerical field where the annual median earnings of both groups were equal in 1974.

The relative earnings position of black workers to white workers is seen through the index of wage gap. This index measures earnings discrimination between the two groups. Any increase in the index implies that the relative earnings position of black workers deteriorated relative to that of white workers. Conversely, any decrease in the index implies that the relative earnings position of blacks improved. If the index remains the same, it would imply no change in the relative earnings position of black workers.

In those job categories where white annual median wages increased faster than those of black workers, the index of wage gap increased (officials and managers - 5.40 percent to 12.20 percent and professional and technical - 4.00 percent to 6.80 percent); and the relative earnings position of black workers declined. In the job categories where black annual median wages increased faster than those of white workers, the index of wage gap declined (office and clerical - 7.30 percent to zero, and sales workers - 39.3 percent to 30.00 percent) and the relative earnings position of blacks improved. In the craft workers category where the annual median earnings of both groups were the same, the index of wage gap remained constant, and there was no change in the relative earnings position of black workers.

The index of wage gap reflects the hiring and promotional practices of employers. Previously, we noted that more blacks were employed in these positions in 1974 than in 1969. However, the continuation of the index of wage gap does suggest that blacks are entering the job categories through job assignments which have lower earnings than whites. In addition, the increase in the wage gap may be partially explained by promotional practices which permit only a few blacks to move upward into better paying job assignments as compared to white workers. The relative earnings position of black professional and technical workers and their index of wage gap tends to imply that they were somewhat better off than black officials and managers -- especially in hiring situations and where pro-

motions were concerned. It would also appear that black sales workers were improving their economic lot somewhat, while that of black craft workers almost paralleled that of white workers.

The index of wage gap gives another insight into employment discrimination. Its existence suggests that blacks are treated differently from whites when employers make job assignments. This differential treatment has resulted in unequal worker distribution throughout the various occupations which comprise the job category. On the basis of the individual indices, it appears that black workers tend to be concentrated in those occupations where the wages are the lowest. Clearly the unequal treatment in job assignment has had an adverse impact upon the earnings of blacks and this result could not have happened by chance. Whether it is the result of present discriminatory practices or present effects of past discrimination, the impact is the same. How much economic effect it has on black workers and the black community will be discussed in the next section.

Wage Bill Loss

Employment discrimination results in economic loss to the black work force. It results in the loss of billions of dollars in wages which would have been earned if blacks had been employed at fair-share levels with equality of occupational distribution and job assignments. But as previously stated, blacks are not employed in numbers commensurate with their availability for work and their job-mix and level of earnings lag behind the whites. Hence, the actual annual wage bill received by blacks is less than the wage bill which would be expected based upon fair-share employment, equal job assignments, and earnings equal to whites. Any differences between the actual and expected wage bill represents the wage bill loss. This loss is called the wage bill gap.

Our task is twofold: First, we must estimate the wage loss and determine if the annual wage loss is increasing or decreasing. Second, we must determine how much of the wage loss is due to employment gaps, how much is attributed to inequality of job assignments within occupational categories, and how much to wage differentials. In order to make determinations, we should view the wage loss from three perspectives. One, we assume that the level of black employ-

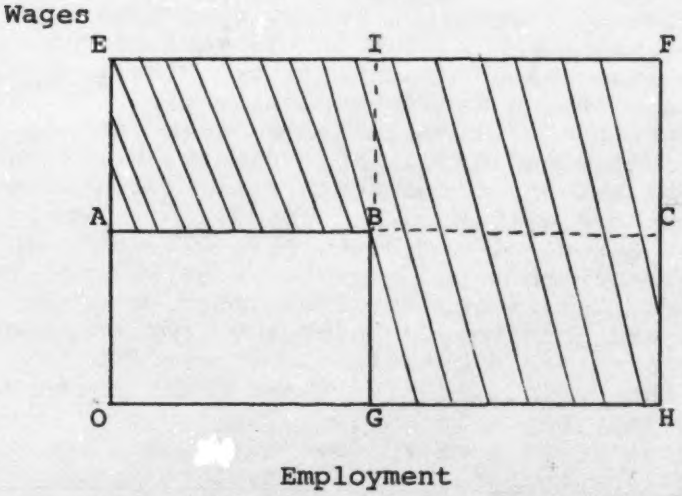
ment is equal to black availability rates and that the job assignments and occupational distribution of blacks are equal to those of whites. Two, we assume that the level of black employment is equal to black availability rates while the job assignments within occupational categories and median earnings of blacks are less than those of whites. Three, we assume that job assignments within occupational categories and median earnings of blacks are equal to those of whites, while the level of black employment is less than black availability rates. Under the first assumption, the difference between the expected wage bill and the actual wage bill will show the economic impact of inequities of employment and inequalities of job assignments and wage differentials upon blacks. Under the second assumption the difference between the expected wage bill and the actual wage bill will show what proportion of the wage loss is due to inequities of employment (less than fair-share level). Under the third assumption the difference between the expected wage bill and the actual wage bill will show what proportion of the wage loss is due to the wage effect measured at actual employment levels. The data in Tables 25-31 provide the bases for our analyses.

Projections of total wage loss for the period 1969 to 1974 are derived from data in Table 25. The actual wage bill received by black workers is shown in column 2. The expected wage bill black workers would have received if the level of black employment and job assignments and occupational distribution of blacks had been equal to those of white workers is given in column 3. The wage loss, or wage bill gap, which represents the difference between the two wage bills is shown in column 6.

Under our first assumption, blacks would have received over $104.7 billion in wages for the six-year period. But the assumptions were not met; hence, black workers received approximately $43.7 billion. Thus, employment discrimination cost black workers $61 billion in lost wages during the period 1969-1974.

The impact of inequity of employment and inequality of job assignments and occupational distribution upon the earnings of black workers is illustrated in Figure 1 below. Here, OA represents the actual median wages of blacks, while OE represents the assumption of black median wages being equal to that of whites.

Figure 1. Actual and Expected Wage Bill of Blacks and Total Wage Bill Gap (six-year period, 1969-1974)



The actual level of black employment is equal to OG, while OH represents the fair-share employment level of blacks. The rectangular area OGBA represents the actual wage bill of $43.7 billion and the area of OHFE represents the expected wage bill of $104.7 billion. The difference between the two areas shown by the area ABGHFE represents the $61 billion wage bill loss for the six-year period.

Further analysis of the data in Tables 25-31 reveal:

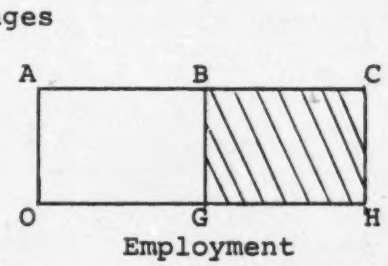
1. For the period the annual wage bill gap rose from $7.6 billion in 1969 to $11.9 billion in 1974.

2. The wage bill gap increased faster during the recessionary period of 1970-71 than during the recovery period of 1971-74.

3. For the period, the wage bill gap increased for all job categories, except for office and clerical occupations where it declined from $1.2 billion in 1969 to $730 million in 1974.

Thus, when we release our assumptions of fair-share employment levels and equalities of job assignments within occupational categories, we find that the economic impact of employment discrimination against blacks has not lessened, but, indeed, has increased during the period 1969 to 1974. To determine how much of the wage loss is due to employment gaps and how much is attributed to inequalities of job assignments within occupational distributions and to wage differentials, we shall analyze the data in terms of our second and third assumptions. First, we shall assume fair-share employment levels for blacks with inequalities in employment and in wages, thereby measuring the employment effect of the wage loss. The data in columns 4 and 7 of Table 25 show the expected wage bill at fair-share employment levels and the employment effect on the wage bill gap, respectively. Under the conditions of this assumption, blacks would have received over $90.5 billion in wages for the period 1969-74. When we release the assumption of fair-share level employment, we find that black workers actually received over $43.7 billion in wages. Employment at less than fair-share level cost black workers $46.8 billion in lost wages. The impact of less than fair-share employment is illustrated in Figure 2. It shows the employment effect on the wage gap due to an actual black employment level, OG, below the fair-share level, OH, by

Figure 2. Employment Effect on Wage Bill Gap



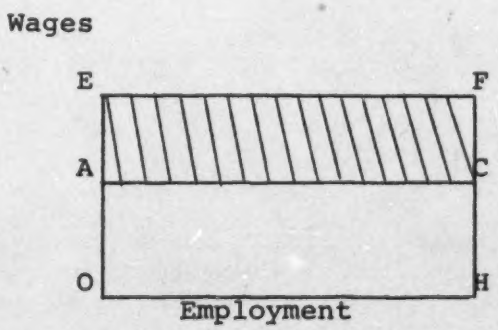
an amount, GH, holding black median wages constant at OA. The component of the gap is indicated by the area GHCB which is the difference between area OHCA and OGBA. Area GHCB represents that portion of the wage bill gap in Figure 1 which lies below the area ACFE. The $46.8 billion wage loss illustrated by the area GHCB in Figure 2 represents about 76 percent of the total wage bill gap. Thus, one can conclude that discriminatory job practices in hiring and

selecting employees which cause the level of black employment to be less than their fair-share account for a sizeable percentage of the total wage bill loss imposed upon black workers.

In order to determine how much of the $61 billion wage gap is due to inequalities of job assignments within occupational categories and to wage differences we shall compare the expected wage bill found under our first and second assumptions. Under our first assumption of fair-share employment and equalities of employment and wages, the expected wage bill amounted to $104.7 billion. Under our second assumption of fair-share employment and inequalities of employment and wages, the expected wage bill came to $90.5 billion. The difference of $14.2 billion represents the wage/employment effect on the wage bill gap.

These effects presented in column 8 of Tables 25-31 and shown in Figure 3 are the difference between the expected bill for blacks (e.g., OHFE corresponding to the $104.7 billion in column 3 of Table 25) and the wage bill measured at a fair-share employment level and actual wages (e.g., area OHCA corresponding to the $90.5 billion in column 4 of Table 25). This difference, equal to the $14.2 billion presented in column 8 of Table 25, is shown in Figure 3 by the area ACFE. This area represents that portion of the wage bill gap shown in Figure 1 which lies above the area OHCA. It accounts for 24 percent of the

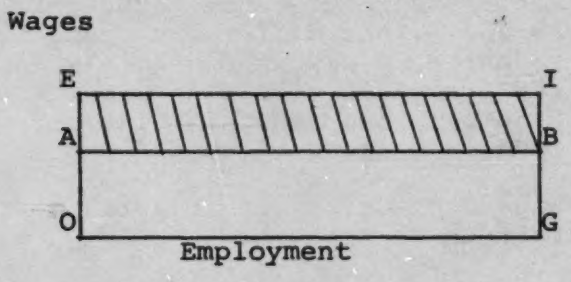
Figure 3. Wage/Job Assignment Measured at Fair-Share Employment



$61 billion wage loss suffered by black workers between 1969 and 1974. It would appear that wage differentials and inequalities of job assignments within occupational categories are secondary to the impact of employment gaps upon the wage bill gap.

To determine what proportion of the wage loss is due to wage differentials, we shall compare the actual wage bill with an expected wage bill measured at actual employment levels, but where median wages of blacks are equal to those of whites. If job assignments and median earnings of blacks were equal to those of whites the expected wage bill would have been $49.8 billion instead of $43.7 billion for the period. The difference of $6.1 billion represents the impact of wage differentials and inequalities of job assignments upon the wage bill loss when measured at actual employment levels. It is shown graphically in Figure 4. The area OGIE corresponds to the data in column 5 of Table 25 (e.g., the $49.8 billion in column 5 of Table 25). The

Figure 4. Wage/Job Assignment Effect Measured at Actual Employment



difference between the above area representing the actual wage bill (e.g., area OGBA or $43.7 billion in column 2 of Table 25) is equal to the wage effect measured at actual black employment. It is shown by area ABIE and corresponds to the difference of $6.1 billion between the totals of columns 2 and 5.

The socio-economic impact of the economic loss incurred by blacks through institutional employment practices goes well beyond the billions of dollars lost in wages.

TREND ANALYSIS OF EMPLOYMENT

To measure the employment position of blacks, three basic models were tested using EEO-1 employment data over the period 1969-1974, and other data, where necessary. In general, the models were used as follows: (1) to examine the employment posture of blacks over time; (2) to compare the employment position of blacks with their availability for work; and (3) to compare the black employment position with the employment position of all population groups as well as whites alone.

The first model measures the relationship between black employment (the dependent variable) and time (the independent variable). This model is stated by the equation:

$$(1) \quad N_1 = a_1 + b_1 T$$

where:

N_1 = the level of black employment for the total of all nine EEO-1 job categories as well as for each of the five selected job categories

a_1 = regression constants

b_1 = regression coefficients

T = time (a dummy variable where 1969 is indicated by 1, 1970 by 2, etc.)

According to the regression coefficients in column 3 of Table 32, black employment exhibited an annual change over the 1969-1974 period which ranged from 205,300 for all nine EEO-1 job categories to 12,800 for officials and managers. The regression coefficients given in column 3 of Table 32 represent the annual change in black employment while regression constants given in the same table represent that part of the level of black employment which is autonomous of time and can be exhibited graphically by the equation's interception of the ordinate axis (i.e., zero). Since these constants indicate black employment levels at a year prior to 1969, they are less than the corresponding employment levels of blacks in 1969 as shown in column 3 of Table 7. This is consistent with a positive regression coefficient and implies that black employment

has increased over the 1969-1974 period and in all probability will continue to increase in the future.

Together, the regression constants and coefficients are used to project the level of black employment. According to equation (1a), total black employment in 1980 can be expected to equal about 4.93 million:

$$(1a) \quad N_1 = a_1 + b_1 (T)$$

$$N_1 = 2,466,200 + 205,300(12) = 4,929,800$$

The underlying assumption of this proposition is that the economic conditions between 1975-1980 will not be significantly different from those of the period 1969-1974. If the economic conditions vary significantly either way, then the projections will either be too small or too large. For instance, if the period is chiefly characterized by a prolonged severe recession, the projection will be too large. On the other hand, if the period is expansionary and Title VII is vigorously enforced, the projection will be too small.

According to the correlation coefficients in column 4 and the percent "explained" variation data in column 5, the relationship between time and black employment appear to be quite close. Changes in black employment appear to have a close relation with time.

The second basic model measures the relationship between black participation rates (the dependent variable) and time (the independent variable). This model is stated by equation (2):

$$(2) \quad n_1 = a_2 + b_2 T$$

Here n_1 is the participation rate of blacks for all nine EEO-1 job categories as well as for each of the five selected job categories while T, a_2, and b_2 are defined as in equation (1).

According to data in column 3 of Table 33, the annual rate of change in the black participation rates range from 0.488 percent for office and clerical workers to 0.237 percent for the total of all nine EEO-1 job categories.

The regression coefficients given in column 3 of Table 33 represent the annual change in black participation rates; the regression constants in this table represent the autonomous part of the black participation rates, and will be used later to project future participation rates for blacks. These constants imply that black participation rates have increased over time and in all probability will continue to increase in the future. (We assume our previous assumption regarding economic activity and Title VII enforcement holds true.) According to the data in column 5 of Table 33, all of the time variables "explain" at least 50 percent of the variation in black employment participation. Thus, all of the trends are statistically significant for all selected job categories. This would imply that the trend model given by equation (2) is valid and can be used to project black participation rates for the future.

Despite the significance of the trend relationships, the coefficients of non-determination as given in column 6, indicate that the change in total black participation rates cannot be fully explained by the time variable alone. This particularly holds true for black participation rates in the sales worker categories. We can only surmise that other factors, including the enforcement of Title VII, have had a favorable impact on these changes.

The third basic model measures the relationship between the black percent employment gap (the dependent variable) and time (the independent variable). The equation for this model is:

$$(3) \quad l_1 - n_1 = a_3 + b_3 T$$

Hence $l_1 - n_1$ represents the percent employment gap which is the difference between the availability rate of blacks (l_1) and the participation rate of blacks. The symbols T, a_3, and b_3 are defined as they were in the two previous models.

The data in column 3 of Table 34, all of which are negative, suggest that employment gaps are closing and in all probability will continue to close. As shown by data in column 5 of this table, however, the trend relationship for the sales worker category is not statistically significant; therefore, any projections of gap closure for this area based upon the statistics of this table are questionable.

According to the data in column 3 of Table 34, the annual rate of decline in the employment gap of blacks rangesfrom 0.388 percent for office and clerical workers to 0.171 percent for professional and technical workers. Gap closures appear to be larger for the office and clerical job category and smaller for professional and technical categories. We shall use the regression constants and coefficients of this table to project future levels of the employment gap and also the years in which gaps will close.

COMPARISON OF BLACK AND WHITE EMPLOYMENT

If the labor market operates in a competitive, open, and equal opportunity manner, it is expected that there will be a significant relationship between employment and education and, that this relationship will be similar for blacks and whites.

The data in Tables 35-42 provide the basis for our analysis. Examination of data in Table 35 reveals that there are significant relationships between black employment and education for the selected job categories as well as total EEO-1 black employment over the 1969-74 period. In each category, more than three-quarters of the variation in black employment over the 1969 to 1974 period is "explained" by the corresponding variation in education.

Information in Table 36 on white employment and education reveals more mixed findings than those on blacks. Here, only three job categories, including (1) officials and managers, (2) craftworkers, and (3) total EEO-1 white employment exhibit relationships similar to those of blacks. For whites in the three remaining job categories, the variations in education "explains" two-thirds or less of their employment variation.

A comparison of data in Tables 35 and 36 reveals that in each job category, the percent "explained" variation for black employment is higher than that of whites. To take professionals and technicians as an example, data in columns 2 and 3 of these two tables may be restated and explained by equations (4a) and (4b).

$$(4a) \quad N_1 = 21{,}000 + 0.310\ E_1$$

$$(4b) \quad N_2 = 1{,}854{,}000 + 0.133\ E_2$$

According to equation (4a), if there are 1,000,000 blacks with at least a college education, then it is expected that blacks in this field will be estimated as follows:

$$(4a) \quad N_1 = 21{,}000 + 0.310\ (1{,}000{,}000)$$
$$= 331{,}000$$

As a comparison to the above estimate, it should be noted that in 1974 there were 188,000 black professionals and technicians reported in the EEO-1 survey and there were 70,500 blacks with at least a college education reported in the CPS. The above estimate is thus within the expected range.

A similar analysis can be made for whites. If, for instance, there are 20,000,000 whites with at least a college education, then equation (4b) provides an estimate of the number of whites who are expected to be in the professional and technical fields.

$$(4b) \quad N_2 = 1{,}854{,}000 + 0.133\ (20{,}000{,}000)$$
$$= 4{,}514{,}000$$

In 1974, approximately 3,494,000 whites were reported in the EEO-1 survey to be in these two fields while some 16,000,000 whites had at least a college education, according to the CPS.

Although the estimated number of white professionals and technicians is, as with blacks, fairly reasonable, equation (4b) is statistically insignificant since nearly two-thirds of the variation in white employment is not "explained" by education. On the other hand, the black relationship specified in equation (4a) is significant since approximately 89 percent of the variation of black professional and technical employment is "explained" by the variation in the number of blacks with at least a college education. In these two job categories, the employment patterns of blacks with regard to education is significantly different from whites.

One inference that can be drawn from the analysis is that there is a closer relationship between black employment and education than for whites. A greater part of the employment of whites is explained by factors other than education.

These findings, as well as those covering the other job categories, are supported by additional regressions, the first of which concerns changes in employment of blacks and whites, by the selected job categories (ΔN_J), and changes in their educational levels (ΔE_J).

Equation (5) presents the relationship

(5) $\Delta N_J = a_2 + b_2 \Delta E_J$

a_2 = regression constant

b_2 = regression coefficient

The statistics resulting from the regressions based upon the changes in both employment and education and which are presented in Tables 37-38 for blacks and whites respectively exhibit a higher percent unexplained variation than do the statistics based upon levels in Tables 35-36. Moreover, the relationship between black employment and educational changes are closer or more precise than those of whites. Thus, it appears that there are different reasons behind the employment patterns of the two classes.

As an example, equations (5a) and (5b) express the relationships between the changes in the two variables for black and white professionals and technicians respectively.

(5a) $\Delta N_J 1 = 3{,}956 + 0.244 \Delta E_a$

(5b) $\Delta N_J 2 = 366{,}500 - 5.494 \Delta E_b$

According to column 5 of Table 37, approximately 55 percent of the variation in black professional and technical employment change is "explained" by the variation of change in the number of blacks with at least a college degree. Thus equation (5a) is statistically significant. On the other hand, only 12 percent of the variation in white employment change is "explained" by variation of change in the number of whites with at least a college degree. Clearly equation (5b) is statistically insignificant.

A final and direct example of the differences in black and white employment patterns is provided by the regression statistics based upon equations (6) and (7) and presented in tables 39 and 40.

(6) $N_1 = a_3 + b_3 N_2$

(7) $\Delta N_1 = a_4 + b_4 \Delta N_2$

Here, white employment in each of the five selected job categories, as well as the total white EEO-1 employment (N_2) serves as a proxy for overall labor demand and the employment possibilities of blacks (N_1). Similarly, changes in white employment, total as well as by selected job category (ΔN_2), indicates changing business conditions and by extension, labor demand, including that for black workers (ΔN_1). Other things remaining constant, a positive and fairly close relationship is expected between black and white employment.

Information in Table 39 indicates that in general there is a significant relationship between black and white employment over the 1969 to 1974 period. Only in the office and clerical field is the relationship statistically insignificant. In that job category, approximately 30 percent of the variation in black employment is "explained" by that in white employment. As shown by data in Table 40, the situation is quite different with regard to the effect of changes in white employment on changes in black employment. Here, only the craft worker field has a significant relationship.

If professional and technical workers are again used as an example, then equations (6) and (7) will restate the regression statistics given in columns 2 and 3 of Table 39 and 40 respectively.

$$(6) \quad N_1 = -142{,}800 + 0.083 \; N_2$$

$$(7) \quad \Delta N_1 = 11{,}600 + 0.036 \Delta N_2$$

Using these equations, black employment in the professional and technical field may be estimated at given levels of white employment. If, for instance, there are 5,000,000 white professionals and technical workers, then it is expected that the corresponding number of black professionals and technicians will be given by equation (6).

$$(6) \quad N_1 = 142{,}800 + 0.083 \; (5{,}000{,}000)$$
$$= 262{,}000$$

Again, the 1974 EEO-1 reports revealed approximately 188,000 blacks and some 3,494,000 whites were employed in these two fields. Thus, the above estimate appears reasonable.

According to equation (7), if the employment of white professionals and technicians increases by 100,000, which is not an unreasonable expectation, then black employment in these two fields should increase by 15,200.

$$(7) \quad \Delta N_1 = 11,600 + 0.036\ (100,000)$$
$$= 15,200$$

With regard to equation (7), however, it should again be noted that the supporting statistics given in columns 5 and 6 of Table 40 indicate that the relationship of employment changes between blacks and whites is insignificant for each of the job categories, except craft workers.

AVAILABILITY OF BLACK LABOR

The previous analysis indicates that the employment patterns of blacks and whites tend to differ particularly with regard to education. Thus, for the five selected job categories, as well as the total of all EEO-1 job categories, the employment of blacks is not determined on the same basis as that of whites. Information on black employment availability and education as given in Tables 41 and 42 can be used to show that the differences in employment patterns of blacks and whites is "inimical" to the equal employment of blacks.

Table 41 concerns black employment levels for the total of the selected job categories, except professionals and technicians which are covered in Table 42. These employment levels may be considered labor demand. Actual EEO-1 and fair-share employment levels are given in columns 2 and 3 respectively, while the level of the employment gap is given in column 4.

Also contained in the two tables are data on the number of blacks with schooling commensurate with the job categories (column 5). These data represent labor supply of blacks. The difference between the total number of blacks with the given education attainment and actual employment (column 6) represents labor supply in excess of EEO-1 labor demand. Although some of this labor supply will be employed in jobs outside EEO-1 survey coverage, not all of it will be so employed. This fact can be seen from the data in the final columns of the two tables. These data are derived from equation (8) and represent black supply (S) available per each job in the employment gap.

$$(8) \quad S = \frac{P-A}{F-A}$$

Where F and A are fair-share and actual employment respectively and P is the number of persons with the required schooling

According to column 7 of Table 41, there were 6.7 blacks available in 1974 to fill each job in the EEO-1 employment gap. Clearly, this figure means that there are ample numbers of blacks available to close the employment gap if they were given an equal opportunity for such employment. This excess labor supply is more than adequate to

cover the employment gap in the EEO-1 universe.

Similarly, the data in column 7 of Table 42 indicate that, as of 1974, there were 2.1 blacks with at least a college education available for each professional or technical job in the employment gap. Although some these persons may already be employed in areas not covered by the EEO-1 reports, it is unreasonable to assume that all of them will be so employed at a level of responsibility commensurate with their education. Even if half of the excess labor supply shown in column 6 of Table 42 were employed in areas not covered by the EEO-1 report, there would still be an adequate number of blacks with at least a college degree to fill the gap.

EMPLOYMENT GAP CLOSURE

An integral part of the analysis of black employment expectations and experiences concerns the estimation of fair-share employment and employment gap of blacks, as well as the estimation of the time period that might elapse before blacks achieve their fair share of employment (i.e., closing the employment gap of blacks). The estimates presented herein on fair-share employment and employment gap of blacks are based on 1969-1974 employment and population data. As data from succeeding years become available, they will of course, be incorporated into the models. Since such additions may change the projections of when the employment gap of blacks will close, a scheme for monitoring the reliability of the models would prove useful in separating those models which are subject to above-average projection errors (Appendix 1).

Three models are used to project the future employment status of blacks (Tables 43-45). In the first model we shall use the employment level as the dependent variable. We shall hold constant the annual rate of increase in the level of black employment. Also, we shall assume no increase in the aggregated level of employment. In the second model we shall use the participation rate as the dependent variable. Here, we will hold constant the annual rate of increase in black participation rates. We shall assume there is no net increase in the number of blacks who are in the 16-64 age group of the population. In the third model we shall use the percent employment gap as the dependent variable. We will hold constant the annual rate of change in gap reduction. We shall assume that black employment availability rate will increase and that participation rates will also increase in the future.

The job categories covered by the three models include: (1) officials and managers, (2) professionals and technicians, (3) sales workers, (4) office and clerical workers, and (5) craft workers. Thus, for each of the models, the employment status of blacks is projected for five job categories.

The data in Table 43 shows gap closure projections based on 1969 to 1974 increases in the level of black employment.

Employment Level Gap Closure

We shall assume that the annual rate of increase in the level of black employment remains at the 1969-1974 level and that the black fair-share levels of employment remain constant at the 1974 levels. Table 43 shows projections of required future years to achieve fair-share employment. Based on the 1969 to 1974 rate our projections reveal that it will take 21 years for blacks to achieve a fair share of officials and managers jobs. It will take two-thirds as long (17 years) for blacks to achieve equity position in professional and technical jobs. For sales workers jobs it will take 10 years; for office and clerical jobs about 9; and for craft workers around 8 years.

Participation Rate Gap Closure

Here we shall assume that the annual rate of change in black participation rates will remain constant and that black employment availability rates will remain at the 1974 level. Table 44 shows projections of future years required to achieve fair-share participation rates. According to the base point annual rate of change in the participation rates it will take 28 years before black experiences will be equal to black expectations in the officials and managers category. It will take blacks 22 years to achieve equity of participation rates in the professional and technicians job categories. It will take 20 years for the black participation rate in sales workers jobs to be equal to the black employment availability rate. For office and clerical positions it will take 4 years, and 10 years for craft workers jobs.

Percent Employment Gap Closure

The projections for the closure of these gaps are based on the following assumptions. One, we assume the annual rate of change in gap reduction will remain constant for the future. Two, we assume black employment availability rates and black participation rates will continue to increase in the future. Table 45 shows the required future years for the gap to be reduced to zero. Based on a zero level of employment percent gap it will take 43 years before the difference between black employment experiences and black employment expectations as officials and managers will be zero. It will take 35 years before the gap is closed in the professional and technician categories; 30 years in the

sales workers grouping; 14 years in the craft workers category; and 5 years in the office and clerical field.

The three models used to project the required future years before blacks might achieve fair-share levels of employment are only projections of what could happen under given sets of circumstances. But, which set of projections should we use in forecasting gap closure? Model One gives us the most optimistic projections for gap closure, but the assumptions appear unrealistic in light of past performances. While the annual rate of increase in the level of black employment might remain constant there is very little likelihood that blacks' fair-share level of employment would remain constant, especially if there are increases in the aggregated levels of employment. Model Two gives us more conservative projections for gap closure, but the validity of the assumptions are questionable. While the annual rate of increase in black participation rates might remain constant, it is doubtful if the black employment availability rate will remain constant. For the rate to remain at the 1974 level, the black percentage of the 16-64 age group in the population must not change. Based on CPS data it appears that the birth rate for blacks has been higher than for whites and hence the percent of blacks in the age group will increase.

While the projections of Model Three are most discouraging in terms of required future years to gap closure, they are at least based upon reasonable assumptions. Although the annual rate of changes in gap reduction during the 1969-1974 based period are small, the model does recognize the fact that black employment availability rates and black participation rates will increase by some unknown quantities in the future. If these assumptions are valid then Model Three becomes our best bet for estimating future years requirements for gap closure.

Of course other factors could raise or lower our projections to future fair-share level of employment. Among the factors to be considered are the business cycle and its ups and downs, enforcement of Title VII, the attitudes of the system toward black America (i.e., white reaction as expressed in so-called reverse discrimination situations), and the attitudes of blacks toward their status in the labor market.

CONCLUSIONS AND SUMMARY OF FINDINGS

This study of black employment in the private sector, as reported by those employers who filed EEO-1 Employer Information Reports annually with the Commission under Title VII of the Civil Rights Act of 1964, is based upon the general proposition that black workers are entitled to a fair share of gainful employment and that the attainment of that fair share is a desirable social and economic national goal of the highest priority. The primary assumption of this paper is that there exists in the market place a sufficient pool of blacks, like whites, who are qualified or qualifiable for entry level positions or higher levels in many of the occupations included under the broad job categories listed on the EEO-1 Reports. It is also assumed that since the number of blacks in this pool is more than adequate to meet the labor requirements to raise black employment to a fair-share level, any level of black employment below that fair-share level is the product of institutional employment practices and procedures which exclude blacks from the workforce and from certain job assignments. Contrary to current accepted positions, we hold to the basic belief that employment disparity arising from this systemization is intentional and represents the wherewithal by which employers achieve the objective of denying fair-share employment to blacks.

Principal Conclusions and Findings

1. The existence of an employment gap in each of the selected job categories implies that black workers as a class are still adversely affected by employment discrimination.

   "Percent employment gaps" existed in all six selected job categories during the 1969-1974 period. Percent employment gaps (the difference between the black employment availability rate and black participation rate) in 1974 were: 7.8 percent for officials and managers category, 7.6 percent for professionals, 3.4 percent for technicians, 5.2 percent for sales workers, 1.9 percent for office and clerical, and 3.7 percent for craft workers.

2. There was some improvement in the overall posture of black workers, and a reduction in the level of employment gap (defined as the difference between the actual share of employment held by blacks and their availability rate). This improvement may be due at least partially to the vigorous enforcement of Title VII by the Equal Employment Opportunity Commission and to court actions filed by the Commission since 1972.

   During the period 1969 to 1974, black employment in the six selected job categories increased by 505 thousand. Progress toward fair-share employment was largely due to improvements in the office and clerical job category. While there was little change in the professional category (a gap of 190 thousand in 1969; 189 thousand in 1974), the employment gap widened in the officials and managers job category (from 225 thousand in 1969 to 269 thousand in 1974).

   The level of the employment gap for the six selected job categories narrowed, from 1.03 million in 1969 to 945 thousand in 1974.

3. The increases in black participation rates between 1969 and 1974 were limited, a microscopic reflection of black tokenism found in other aspects of American life. One may conclude from the percentage point changes in black participation rates that black progress was miniscule.

   Between 1969 and 1974 black participation rates increased as follows: officials and managers 1.4 percentage points, professionals 1.0 percentage points, technicians 1.7 percentage points, sales workers 1.5 percentage points, office and clerical 2.7 percentage points, and craft workers 2.0 percentage points.

   On an annual basis, black participation rates increased as follows: 0.2 percentage points for professionals; 0.3 percentage points for officials and managers, technicians, and sales workers; 0.4 percentage points for craft workers; and 0.5 percentage points for office and clerical.

4. Black workers were treated differently from white workers and were under-utilized in each of the selected job categories. This inequality of treatment between black and white workers is of such a magnitude that it could not have happened by mere chance; it had to be the result of deliberate employment decisions designed to limit the penetration of blacks into selected job categories. It is doubtful if such occupational deficiencies could have occurred through the process of randomly selecting employees from a common pool.

   The differences between the 1969 occupational patterns of blacks and whites appear significant. Approximately 65 percent of all white employment was found in the six selected job categories compared to only 28 percent of all black employment.

   Almost 72 percent of all black employment was concentrated in operatives, laborers and service worker categories compared to 35 percent of all white employment.

   Although the occupational distribution of blacks compared with whites improved by 1974, blacks remained grossly under-utilized in the six selected job categories.

5. Despite increases in both black and white earnings between 1969 and 1974, gaps still existed between the earnings of black and white workers. The existence of wage gaps in 1974 means that blacks are entering the job categories through job assignments which provide lower earnings than whites and that employers' promotional practices permit only a few blacks to move upward into better paying job assignments as compared to whites.

   Annual median earnings of both black and white workers generally increased between 1969 and 1974. Earnings of whites increased faster than those of blacks in some job categories -- officials and managers, professionals and technicians. Earnings of blacks increased faster than those of whites in the office and clerical, and the sales workers categories.

Earnings of blacks and whites increased about the same in the craft workers category. The dollar wage gap between black and white workers increased in every category, except for office and clerical workers.

6. The economic impact of employment discrimination against blacks has not lessened, but indeed, has increased during the period 1969 to 1974. Wages for blacks would have amounted to $104.7 billion in the 1969 to 1974 period if blacks had received their fair share of jobs and equality of job assignments.

   During the period, employment discrimination cost black workers almost $61 billion in lost wages. Most (76 percent) of the $61 billion wage loss suffered by blacks stemmed from their employment at levels below their fair share. Inequalities of job assignments accounted for $14.2 billion of the wage bill lost (24 percent).

   The annual wage bill gap rose from $7.6 billion in 1969 to $11.9 billion in 1974.

   The wage bill gap increased for all job categories except office and clerical occupations where it declined from $1.2 billion in 1969 to $730 million in 1974. The wage bill gap increased faster during the recessionary period of 1970-71 than during the recovery period of 1971-74.

7. Although black participation has increased since 1969 and in all probability will continue to increase in the future, the changes in total participation cannot be fully explained by the passage of time alone; hence, we surmise that the enforcement of Title VII by the Equal Employment Opportunity Commission had a favorable impact on these changes.

   The annual increase in black employment ranged from 35,800 for office and clerical jobs to 12,800 for officials and managers.

The coefficients of non-determination indicate that the passage of time alone cannot fully explain changes in total black participation.

8. Blacks are required to meet more stringent educational criteria than whites when competing for jobs.

   There is a closer relationship between employment and education for blacks than for whites. A greater part of the employment of blacks is explained by education (from 89 percent in the professional and technicians categories to 99 percent in the officials and managers category). On the other hand, a smaller part of the employment of whites is explained by education (from 35 percent in the professional and technicians categories to 92 percent in the officials and managers category).

9. There are enough blacks with the required number of years of schooling to close the employment gap if they were given equal opportunity for employment. Although some of these persons may already be employed in areas not covered by the EEO-1 Report, it is unreasonable to assume that all of them will be employed at levels of responsibilities commensurate with their education.

   In 1974, there were 2.1 blacks with at least a college education for each professional or technician job in the employment gap. For the other selected job categories there were 6.7 blacks for each job in the EEO-1 employment gap.

10. Assuming that black employment availability rates and black participation rates will increase by some unknown quantity in the future, it will be sometime in the 21st century before the employment gaps will close and blacks achieve fair-share levels of employment in all six of the selected job categories.

The percent employment gap in the officials and managers category will not be closed until the year 2017. It will take 35 years before the gap is closed in the professional and technicians categories (year 2009). It will take 30 years before the gap is closed in the sales workers category (year 2004). It will take 14 years before the gap is closed in the craft workers category (year 1988). It should take only 5 years before the gap is closed in the office and clerical group (year 1979).

When black employment experiences will be equal to black employment expectations is a major question. Our analysis of the data has shown that some progress has been made. But unless drastic improvements are made in the immediate future, black employment will continue to lag behind black expectations.

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Table 1
Black Employment Availability and Participation Rates and Percent Employment Gap
U. S. Summary, 1969-1974
Officials and Managers

Year	Rate		Percent Employment Gap (2) - (3)
	Employment Availability	Participation	
(1)	(2)	(3)	(4)
Δ1969 - 1974	0.5	1.4	-0.9
Average Δ	0.1	0.3	-0.2
1969	10.2	1.5	8.7
1970	10.3	1.9	8.4
1971	10.4	2.0	8.4
1972	10.5	2.4	8.1
1973	10.6	2.7	7.9
1974	10.7	2.9	7.8

Sources: Equal Employment Opportunity Reports and Current Population Survey.

Table 2
Black Employment Availability and Participation Rates and Percent Employment Gap
U. S. Summary, 1969-1974
Professionals

Year	Rate		Percent Employment Gap
	Employment Availability	Participation	(2) - (3)
(1)	(2)	(3)	(4)
Δ1969 - 1974	0.5	1.0	-0.5
Average Δ	0.1	0.2	-0.1
1969	10.2	2.1	8.1
1970	10.3	2.5	7.8
1971	10.4	2.6	7.8
1972	10.5	3.0	7.5
1973	10.6	3.2	7.4
1974	10.7	3.1	7.6

Sources: Equal Employment Opportunity Reports and Current Population Survey.

Table 3
Black Employment Availability and Participation
Rates and Percent Employment Gap
U. S. Summary, 1969-1974
Technicians

Year	Rate		Percent Employment Gap
	Employment Availability	Participation	(2) - (3)
(1)	(2)	(3)	(4)
Δ1969-1974	0.5	1.7	-2.2
Average Δ	0.1	0.3	-0.4
1969	10.2	5.6	4.6
1970	10.3	6.2	4.1
1971	10.4	6.1	4.3
1972	10.5	5.5	7.0
1973	10.6	7.3	3.3
1974	10.7	7.3	3.4

Sources: Equal Employment Opportunity Reports
and Current Population Survey.

Table 4
Black Employment Availability and Participation Rates and Percent Employment Gap
U. S. Summary, 1969-1974
Sales Workers

Year	Rate		Percent Employment Gap (2) - (3)
	Employment Availability	Participation	
(1)	(2)	(3)	(4)
Δ 1969 - 1974	0.5	1.5	-1.0
Average Δ	0.1	0.3	-0.2
1969	10.2	4.0	6.2
1970	10.3	4.4	5.9
1971	10.4	3.9	6.5
1972	10.5	4.1	6.4
1973	10.6	5.1	5.5
1974	10.7	5.5	5.2

Sources: Equal Employment Opportunity Reports and Current Population Survey.

Table 5
Black Employment Availability and Participation Rates and Percent Employment Gap
U. S. Summary, 1969-1974
Office and Clerical Workers

Year	Rate		Percent Employment Gap
	Employment Availability	Participation	(2) - (3)
(1)	(2)	(3)	(4)
Δ 1969-1974	0.5	2.7	-2.2
Average Δ	0.1	0.5	-0.4
1969	10.2	6.1	4.1
1970	10.3	7.4	2.9
1971	10.4	6.8	3.6
1972	10.5	7.7	2.8
1973	10.6	8.3	2.3
1974	10.7	8.8	1.9

Sources: Equal Employment Opportunity Reports and Current Population Survey.

Table 6
Black Employment Availability and Participation Rates and Percent Employment Gap
U. S. Summary, 1969-1974
Craft Workers

Year	Rate		Percent Employment Gap (2) - (3)
	Employment Availability	Participation	
(1)	(2)	(3)	(4)
Δ 1969-1974	0.5	2.0	-1.5
Average Δ	0.1	0.4	-0.3
1969	10.2	5.0	5.2
1970	10.3	5.6	4.7
1971	10.4	5.4	5.0
1972	10.5	6.0	4.5
1973	10.6	6.5	4.1
1974	10.7	7.0	3.7

Sources: Equal Employment Opportunity Reports and Current Population Survey.

Table 7
Actual and Fair-share Employment
Levels and Level of Employment Gap
Total, Selected Job Categories
U. S. Summary, 1969-1974
(In Thousands)

Year	Employment Level			Level of Employment Gap
	Total, All Population Groups	Black		
		Actual	Fair-share	(4) - (3)
(1)	(2)	(3)	(4)	(5)
Change, 1969-1974				
Total	3,143	505	425	-81
Average	629	101	85	-16
1969	17,419	751	1,776	1,026
1970	17,292	867	1,776	909
1971	18,984	900	1,973	1,073
1972	20,673	1,062	2,171	1,109
1973	20,929	1,203	2,257	1,054
1974	20,560	1,256	2,201	945

Source: Equal Employment Opportunity Reports.
Individual entries may not sum to totals due to rounding.

Table 8
Actual and Fair-share Employment
Levels and Level of Employment Gap
Officials and Managers
U. S. Summary, 1969-1974
(In Thousands)

Year	Employment Level			Level of Employment Gap
	Total, All Population Groups	Black		
		Actual	Fair-share	(4) - (3)
(1)	(2)	(3)	(4)	(5)
Change, 1969-1974				
Total	864	61	105	44
Average	173	12	21	9
1969	2,579	38	263	225
1970	2,803	52	289	237
1971	2,813	57	292	236
1972	3,126	74	328	254
1973	3,370	89	357	268
1974	3,443	99	368	269

Source: Equal Employment Opportunity Reports.
Individual entries may not sum to totals due to rounding.

Table 9
Actual and Fair-share Employment Levels and Level of Employment Gap
Professionals
U. S. Summary, 1969-1974
(In Thousands)

Year	Employment Level			Level of Employment Gap
	Total, All Population Groups	Black		
		Actual	Fair-share	(4) - (3)
(1)	(2)	(3)	(4)	(5)
Change, 1964-1974				
Total	143	28	27	- 1
Average	29	6	5	- 0.2
1969	2,354	50	240	190
1970	2,551	64	263	199
1971	2,490	66	260	194
1972	2,666	79	280	201
1973	2,862	92	303	211
1974	2,497	78	267	189

Source: Equal Employment Opportunity Reports.
Individual entries may not sum to totals due to rounding.

Table 10
Actual and Fair-share Employment
Levels and Level of Employment Gap
Technicians
U. S. Summary, 1969-1974
(In Thousands)

Year	Employment Level			Level of Employment Gap
	Total, All Population Groups	Black		
		Actual	Fair-share	(4) - (3)
(1)	(2)	(3)	(4)	(5)
Change, 1969-1974				
Total	263	40	35	-5
Average	53	8	7	-1
1969	1,247	70	127	57
1970	1,347	83	139	56
1971	1,400	86	146	60
1972	1,804	98	189	91
1973	1,543	112	164	52
1974	1,510	110	162	52

Source: Equal Employment Opportunity Reports.
Individual entries may not sum to totals due to rounding.

Table 11
Actual and Fair-share Employment
Levels and Level of Employment Gap
Office and Clerical Workers
U. S. Summary, 1969-1974
(In Thousands)

Year	Employment Level			Level of Employment Gap
	Total, All Population Groups	Black		
		Actual	Fair-share	(4) - (3)
(1)	(2)	(3)	(4)	(5)
Change, 1969-1974				
Total	368	170	65	-105
Average	74	36	15	-21
1969	5,034	309	513	204
1970	5,278	377	543	166
1971	5,463	369	568	199
1972	5,448	418	572	154
1973	5,570	462	590	128
1974	5,402	479	578	99

Source: Equal Employment Opportunity Reports.
Individual entries may not sum to totals due to rounding.

Table 12
Actual and Fair-share Employment
Levels and Level of Employment Gap
Sales Workers
U. S. Summary, 1969-1974
(In Thousands)

Year	Employment Level			Level of Employment Gap
	Total, All Population Groups	Black		
		Actual	Fair-share	(4) - (3)
(1)	(2)	(3)	(4)	(5)
Change, 1969-1974.				
Total	750	80	92	12
Average	150	16	19	3
1969	2,506	100	256	156
1970	2,632	113	271	158
1971	2,939	114	306	192
1972	3,473	141	365	223
1973	3,218	163	341	178
1974	3,256	180	348	168

Source: Equal Employment Opportunity Reports.
Individual entries may not sum to totals due to rounding.

Table 13
Actual and Fair-share Employment
Levels and Level of Employment Gap
Craft Workers
U. S. Summary, 1969-1974
(In Thousands)

Year	Employment Level			Level of Employment Gap
	Total, All Population Groups	Black		
		Actual	Fair-share	(4) - (3)
(1)	(2)	(3)	(4)	(5)
Change, 1969-1974				
Total	454	111	68	-43
Average	90	22	13	-9
1969	3,956	197	404	207
1970	4,132	231	426	195
1971	3,878	209	403	194
1972	4,155	251	436	185
1973	4,366	284	463	179
1974	4,410	308	472	164

Source: Equal Employment Opportunity Reports.
Individual entries may not sum to totals due to rounding.

Table 14
Occupational Distribution and
Index of Occupational Gap
Officials and Managers
U. S. Summary, 1969-1974

Year	Occupational Distribution			Index of Occupational Gap
	Black	White	Black as Percent of Whites	
(1)	(2)	(3)	[(2)÷(3)]x100 (4)	100 - (4) (5)
1969	1.4	10.0	14.00	86.00
1970	1.7	10.3	16.50	83.50
1971	2.0	10.4	19.20	80.80
1972	2.3	10.7	21.50	78.50
1973	2.5	11.1	22.50	77.50
1974	2.7	11.5	23.50	76.50

Source: Equal Employment Opportunity Reports.

Table 15
Occupational Distribution and
Index of Occupational Gap
Professional Workers
U. S. Summary, 1969-1974

Year	Occupational Distribution			Index of Occupational Gap
	Black	White	Black as Percent of Whites [(2)÷(3)]x100	100 - (4)
(1)	(2)	(3)	(4)	(5)
1969	1.8	8.9	20.20	79.80
1970	2.1	9.1	23.10	76.90
1971	2.3	10.4	22.10	77.90
1972	2.3	10.7	21.50	78.50
1973	2.5	9.2	27.20	72.80
1974	2.1	8.2	25.60	74.40

Source: Equal Employment Opportunity Reports.

Table 16
Occupational Distribution and
Index of Occupational Gap
Technicians
U. S. Summary, 1969-1974

Year	Occupational Distribution			Index of Occupational Gap
	Black	White	Black as Percent of Whites [(2)÷(3)]x100	100 - (4)
(1)	(2)	(3)	(4)	(5)
1969	2.5	4.5	55.60	44.40
1970	2.7	4.6	58.70	41.30
1971	3.0	4.9	61.20	37.80
1972	3.0	5.9	50.80	49.20
1973	3.1	4.7	66.00	34.00
1974	3.0	4.7	63.80	36.20

Source: Equal Employment Opportunity Reports.

Table 17
Occupational Distribution and
Index of Occupational Gap
Sales Workers
U. S. Summary, 1969-1974

Year	Occupational Distribution			Index of Occupational Gap
	Black	White	Black as Percent of Whites [(2)÷(3)]x100	
(1)	(2)	(3)	(4)	(5)
1969	3.6	9.4	38.30	61.70
1970	3.7	9.3	39.80	60.20
1971	4.0	10.6	37.70	62.30
1972	4.4	11.5	38.30	61.70
1973	4.5	10.2	44.10	55.9
1974	4.9	10.5	46.70	53.30

Source: Equal Employment Opportunity Reports.

Table 18
Occupational Distribution and
Index of Occupational Gap
Office and Clerical Workers
U. S. Summary, 1969-1974

Year	Occupational Distribution			Index of Occupational Gap
	Black	White	Black as Percent of Whites [(2)÷(3)]x100	100 - (4)
(1)	(2)	(3)	(4)	(5)
1969	11.3	18.3	61.70	38.30
1970	12.2	17.9	68.20	31.80
1971	12.9	18.8	68.60	31.40
1972	12.9	17.1	75.40	24.60
1973	12.7	16.9	75.10	24.90
1974	13.0	16.5	78.80	21.20

Source: Equal Employment Opportunity Reports.

Table 19
Occupational Distribution and
Index of Occupational Gap
Craft Workers
U. S. Summary, 1969-1974

Year	Occupational Distribution			Index of Occupational Gap
	Black	White	Black as Percent of Whites [(2)÷(3)]x100	100 - (4)
(1)	(2)	(3)	(4)	(5)
1969	7.2	14.5	49.60	50.40
1970	7.5	14.2	52.80	47.20
1971	7.3	13.6	53.70	46.30
1972	7.7	13.3	57.90	42.10
1973	7.8	13.5	57.80	42.20
1974	8.4	13.8	60.90	39.10

Source: Equal Employment Opportunity Reports.

Table 20
Annual Median Earnings and
Relative Index of Wage Gap
Officials and Managers
U. S. Summary, 1969-1974

Year	Earnings (In Thousands of Dollars)			Relative Index of Wage Gap (1969 Base Year)
	Blacks	Whites	Difference (3) - (2)	
(1)	(2)	(3)	(4)	(5)
1969	7.0	7.4	0.4	05.40
1970	7.5	10.0	2.5	33.70
1971	9.3	10.4	1.1	14.90
1972	8.7	10.9	2.2	29.70
1973	10.9	12.4	1.5	20.30
1974	11.5	13.1	1.6	21.60

Source: Current Population Survey.
Individual entries may not sum to totals due to rounding.

Table 21
Annual Median Earnings and
Relative Index of Wage Gap
Professionals and Technicians
U. S. Summary, 1969-1974

Year	Earnings (In Thousands of Dollars)			Relative Index of Wage Gap (1969 Base Year)
	Blacks	Whites	Difference (3) - (2)	
(1)	(2)	(3)	(4)	(5)
1969	7.2	7.5	0.3	04.30
1970	7.3	7.7	0.4	05.30
1971	8.7	9.9	1.2	16.00
1972	8.8	10.7	1.9	25.30
1973	10.0	11.1	1.1	14.70
1974	11.3	12.0	0.7	09.30

Source: Current Population Survey.
Individual entries may not sum to totals due to rounding.

Table 22
Annual Median Earnings and
Relative Index of Wage Gap
Office and Clerical Workers
U. S. Summary, 1969-1974

Year	Earnings (In Thousands of Dollars)			Relative Index of Wage Gap (1969 Base Year)
	Blacks	Whites	Difference (3) - (2)	
(1)	(2)	(3)	(4)	(5)
1969	5.1	5.5	0.4	07.30
1970	5.8	5.9	0.1	01.80
1971	6.0	6.0	0	0
1972	6.1	6.3	0.2	03.70
1973	7.2	6.7	-0.5	-09.10
1974	7.3	7.3	0	0

Source: Current Population Survey.
Individual entries may not sum to totals due to rounding.

Table 23
Annual Median Earnings and
Relative Index of Wage Gap
Sales Workers
U. S. Summary, 1969-1974

Year	Earnings (In Thousands of Dollars)			Relative Index of Wage Gap (1969 Base Year)
	Blacks	Whites	Difference (3) - (2)	
(1)	(2)	(3)	(4)	(5)
1969	3.4	5.6	2.2	39.30
1970	4.4	6.7	2.3	41.10
1971	5.4	7.5	2.1	37.50
1972	5.6	8.0	2.4	42.90
1973	6.1	8.5	2.4	42.90
1974	6.3	9.0	2.7	48.20

Source: Current Population Survey.
Individual entries may not sum to totals due to rounding.

Table 24
Annual Median Earnings and
Relative Index of Wage Gap
Craft Workers
U. S. Summary, 1969-1974

Year	Earnings (In Thousands of Dollars)			Relative Index of Wage Gap (1969 Base Year)
	Blacks	Whites	Difference (3) - (2)	
(1)	(2)	(3)	(4)	(5)
1969	6.0	7.4	1.4	18.90
1970	6.5	8.0	1.5	20.20
1971	6.9	8.8	1.9	25.60
1972	8.4	10.1	1.7	22.90
1973	8.7	10.2	1.5	20.20
1974	9.0	11.1	2.1	28.40

Source: Current Population Survey.
Individual entries may not sum to totals due to rounding.

Table 25
Actual and Expected Annual Wage Bill and
Wage Bill Gap of Black Workers
Total, Selected Job Categories
U. S. Summary, 1969-1974
(Numbers in Millions of Dollars)

	Annual Wage Bill				Annual Wage Bill Gap			
		Expected			Total		Wage Effect	
Year	Actual	Total	At Fair-share Employment	At Median Wages Equal to Whites	(3) - (2) or (7) + (8)	Employment Effect (4) - (2)	At Fair-share Employment (3) - (4)	At Actual Employment (5) - (2)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1969	4,170	11,770	10,260	4,810	7,600	6,090	1,510	640
1970	5,330	13,310	11,320	6,120	7,980	5,990	1,990	790
1971	6,110	16,290	14,060	7,000	10,180	7,950	2,230	890
1972	7,660	19,520	16,170	9,010	11,860	8,510	3,350	1,350
1973	9,800	21,220	18,920	10,780	11,420	9,120	2,300	980
1974	10,660	22,600	19,800	12,090	11,940	9,140	2,800	1,430
Total	43,730	104,710	90,530	49,810	60,980	46,800	14,180	6,080

Sources: Equal Employment Opportunity Reports and Current Population Survey.
Individual entries may not sum to totals due to rounding.

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Table 26
Actual and Expected Annual Wage Bill and
Wage Bill Gap of Black Workers
By Job Category
U. S. Summary, 1969
(Numbers in Millions of Dollars)

Job Category	Annual Wage Bill				Annual Wage Bill Gap			
		Expected			Total		Wage Effect	
	Actual	Total	At Fair-share Employment	At Median Wages Equal to Whites	(3) - (2) or (7) + (8)	Employment Effect (4) - (2)	At Fair-share Employment (3) - (4)	At Actual Employment (5) - (2)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Officials/ Managers	270	1,920	1,820	280	1,650	1,550	100	10
Professionals/ Technicians	860	2,740	2,630	890	1,880	1,770	110	30
Sales Workers	340	1,410	860	550	1,070	520	550	210
Office/ Clerical	1,530	2,770	2,570	1,650	1,240	1,040	200	120
Craft Workers	1,170	2,930	2,380	1,440	1,760	1,210	550	270
Total	4,170	11,770	10,260	4,810	7,600	6,090	1,510	640

Sources: Equal Employment Opportunity Reports and Current Population Survey
Individual entries may not sum to totals due to rounding.

Table 27
Actual and Expected Annual Wage Bill and
Wage Bill Gap of Black Workers
By Job Category
U. S. Summary, 1970
(Numbers in Millions of Dollars)

Job Category	Annual Wage Bill				Annual Wage Bill Gap			
		Expected			Total		Wage Effect	
	Actual	Total	At Fair-share Employment	At Median Wages Equal to Whites	(3) - (2) or (7) + (8)	Employment Effect (4) - (2)	At Fair-share Employment (3) - (4)	At Actual Employment (5) - (2)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Officials/ Managers	350	2,620	1,970	470	2,270	1,620	650	120
Professionals/ Technicians	1,030	2,940	2,790	1,090	1,910	1,760	150	60
Sales Workers	430	1,530	1,000	660	1,100	570	530	230
Office/ Clerical	2,080	2,970	2,920	2,120	890	840	50	40
Craft Workers	1,440	3,250	2,640	1,780	1,810	1,200	610	340
Total	5,330	13,310	11,320	6,120	7,980	5,990	1,990	790

Sources: Equal Employment Opportunity Reports and Current Population Survey
Individual entries may not sum to totals due to rounding.

Table 28
Actual and Expected Annual Wage Bill and
Wage Bill Gap of Black Workers
By Job Category
U. S. Summary, 1971
(Numbers in Millions of Dollars)

Job Category	Annual Wage Bill				Annual Wage Bill Gap			
		Expected			Total		Wage Effect	
	Actual	Total	At Fair-share Employment	At Median Wages Equal to Whites	(3) - (2) or (7) + (8)	Employment Effect (4) - (2)	At Fair-share Employment (3) - (4)	At Actual Employment (5) - (2)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Officials/ Managers	530	3,040	2,720	590	2,510	2,190	320	60
Professionals/ Technicians	1,320	4,020	3,520	1,510	2,700	2,200	500	190
Sales Workers	620	2,290	1,650	850	1,670	1,030	640	230
Office/ Clerical	2,210	3,400	3,400	2,210	1,190	1,190	0	0
Craft Workers	1,430	3,500	2,770	1,840	2,110	1,340	770	410
Total	6,110	16,290	14,060	7,000	10,180	7,950	2,230	890

Sources: Equal Employment Opportunity Reports and Current Population Survey
Individual entries may not sum to totals due to rounding.

Table 29
Actual and Expected Annual Wage Bill and
Wage Bill Gap of Black Workers
By Job Category
U. S. Summary, 1972
(Numbers in Millions of Dollars)

Job Category	Annual Wage Bill				Annual Wage Bill Gap			
		Expected			Total		Wage Effect	
	Actual	Total	At Fair-share Employment	At Median Wages Equal to Whites	(3) - (2) or (7) + (8)	Employment Effect (4) - (2)	At Fair-share Employment (3) - (4)	At Actual Employment (5) - (2)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Officials/ Managers	640	3,580	2,850	810	2,940	2,210	730	170
Professionals/ Technicians	1,570	5,020	4,130	1,900	3,450	2,560	890	330
Sales Workers	790	2,920	2,040	1,130	2,130	1,250	880	340
Office/ Clerical	2,550	3,600	3,490	2,630	1,050	940	110	80
Craft Workers	2,110	4,400	3,660	2,540	2,290	1,550	740	430
Total	7,660	19,520	16,170	9,010	11,860	8,510	3,350	1,350

Sources: Equal Employment Opportunity Reports and Current Population Survey
Individual entries may not sum to totals due to rounding.

Table 30
Actual and Expected Annual Wage Bill and
Wage Bill Gap of Black Workers
By Job Category
U. S. Summary, 1973
(Numbers in Millions of Dollars)

Job Category	Annual Wage Bill				Annual Wage Bill Gap			
		Expected			Total		Wage Effect	
	Actual	Total	At Fair-share Employment	At Median Wages Equal to Whites	(3) - (2) or (7) + (8)	Employment Effect (4) - (2)	At Fair-share Employment (3) - (4)	At Actual Employment (5) - (2)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Officials/ Managers	970	4,430	3,900	1,110	3,460	2,930	530	140
Professionals/ Technicians	2,040	5,180	4,670	2,270	3,140	2,630	514	230
Sales Workers	990	2,910	2,070	1,390	1,920	1,080	830	400
Office/ Clerical	3,340	3,960	4,260	3,100	620	930	-310	-240
Craft Workers	2,470	4,740	4,020	2,910	2,280	1,550	720	440
Total	9,800	21,220	18,920	10,780	11,420	9,120	2,300	970

Sources: Equal Employment Opportunity Reports and Current Population Survey
Individual entries may not sum to totals due to rounding.

Table 31
Actual and Expected Annual Wage Bill and
Wage Bill Gap of Black Workers
By Job Category
U. S. Summary, 1974
(Numbers in Millions of Dollars)

Job Category	Annual Wage Bill				Annual Wage Bill Gap			
		Expected			Total		Wage Effect	
	Actual	Total	At Fair-share Employment	At Median Wages Equal to Whites	(3) - (2) or (7) + (8)	Employment Effect (4) - (2)	At Fair-share Employment (3) - (4)	At Actual Employment (5) - (2)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Officials/ Managers	1,140	4,840	4,260	1,300	3,690	3,120	480	160
Professionals/ Technicians	2,120	5,140	4,850	2,250	3,020	2,730	290	130
Sales Workers	1,140	3,140	2,210	1,620	2,000	1,070	930	480
Office/ Clerical	3,490	4,220	4,220	3,490	730	730	0	0
Craft Workers	2,770	5,260	4,260	3,430	2,490	1,480	1,010	660
Total	10,660	22,600	19,800	12,090	11,940	9,140	2,800	1,430

Sources: Equal Employment Opportunity Reports and Current Population Survey
Individual entries may not sum to totals due to rounding.

Table 32
Regression Trend Analysis of Black Employment
by Job Category
U. S. Summary, 1969-74

Job Category	Regression		Correlation Coefficient	Percent Variation	
	Constant (in thousands)	Coefficient (in thousands)		Explained (4) x (4) x 100	Unexplained 100 - (5)
(1)	(2)	(3)	(4)	(5)	(6)
Officials/ Managers	22.6	12.8	0.99	98.9	1.1
Professionals/ Technicians	107.5	16.0	0.94	88.4	11.6
Sales Workers	69.7	17.9	0.97	95.0	5.0
Office/ Clerical	272.6	35.8	0.99	97.4	2.6
Craft Workers	165.1	22.8	0.96	91.2	8.8
Total, All EEO-1 Jobs	2,466.2	205.3	0.95	90.6	9.4

Table 33
Regression Trend Analysis of Black Employment Participation,
by Job Category
U. S. Summary, 1969-74

Job Category	Regression		Correlation Coefficient	Percent Variation	
	Constant	Coefficient		Explained (4) x (4) x 100	Unexplained 100 - (5)
(1)	(2)	(3)	(4)	(5)	(6)
Officials/ Managers	1.253	0.280	0.99	98.5	1.5
Professionals/ Technicians	3.100	0.271	0.97	93.8	6.2
Sales Workers	3.520	0.280	0.80	64.1	35.9
Office/ Clerical	5.807	0.488	0.93	86.5	14.5
Craft Workers	4.587	0.380	0.96	92.6	7.4
Total, All EEO-1 Jobs	9.287	0.237	0.76	58.3	41.7

Table 34
Regression Trend Analysis of the Percent Employment Gap of Blacks, by Job Category, U. S. Summary, 1969-74

Job Category	Regression		Correlation Coefficient	Percent Variation	
	Constant	Coefficient		Explained (4) x (4) x 100	Unexplained 100 - (5)
(1)	(2)	(3)	(4)	(5)	(6)
Officials/ Managers	8.847	-0.180	-0.98	96.4	3.6
Professionals/ Technicians	7.000	-0.171	-0.92	85.7	14.3
Sales Workers	6.580	-0.180	-0.65	42.5	57.5
Office/ Clerical	4.293	-0.388	-0.90	80.2	19.8
Craft Workers	5.513	-0.280	-0.93	87.2	12.8
Total, All EEO-1 Jobs	0.813	-0.137	-0.56	31.8	68.2

Table 35
Regression Analysis between Black Employment
and Education, by Job Category
U. S. Summary, 1969-74

Job Category	Regression		Correlation Coefficient	Percent Variation	
	Constant (in thousands)	Coefficient		Explained (4) x (4) x 100	Unexplained 100 - (5)
(1)	(2)	(3)	(4)	(5)	(6)
Officials/ Managers	-115.4	0.033	0.99	98.6	1.4
Professionals/ Technicians	- 21.1	0.310	0.94	88.9	11.1
Sales Workers	-126.6	0.053	0.96	92.8	7.2
Office/ Clerical	-125.0	0.107	0.99	97.6	2.4
Craft Workers	-130.6	0.10[illegible]	0.96	92.5	7.5
Total, All EEO-1 Jobs	200.6	0.54[illegible]	0.97	93.6	6.4

Table 36
Regression Analysis between White Employment
and Education, by Job Category
U. S. Summary, 1969-74

Job Category	Regression		Correlation Coefficient	Percent Variation	
	Constant (in thousands)	Coefficient		Explained (4) x (4) x 100	Unexplained 100 - (5)
(1)	(2)	(3)	(4)	(5)	(6)
Officials/ Managers	-2,370	0.069	0.96	92.2	7.8
Professionals/ Technicians	1,854	0.133	0.59	35.0	65.0
Sales Workers	-2,913	0.091	0.77	59.7	40.3
Office/ Clerical	2,437	0.036	0.68	67.6	32.4
Craft Workers	708	0.066	0.92	84.9	15.1
Total, All EEO-1 Jobs	14,660	0.334	0.90	81.5	18.5

Table 37
Regression Analysis between Black Employment Change and Change in Education, by Job Category, U. S. Summary, 1969-74

Job Category	Regression		Correlation Coefficient	Percent Variation	
	Constant	Coefficient		Explained (4) x (4) x 100	Unexplained 100 - (5)
(1)	(2)	(3)	(4)	(5)	(6)
Officials/ Managers	8,811	0.009	0.27	7.2	92.8
Professionals/ Technicians	3,956	0.244	0.74	54.6	45.4
Sales Workers	37,398	-0.061	-0.56	31.2	68.8
Office/ Clerical	-2,306	0.110	0.51	25.6	74.4
Craft Workers	-28,542	0.218	0.62	37.9	62.1

Table 38
Regression Analysis between White Employment Change and Change in Education, by Job Category, U. S. Summary, 1969-74

Job Category	Regression		Correlation Coefficient	Percent Variation	
	Constant	Coefficient		Explained (4) x (4) x 100	Unexplained 100 - (5)
(1)	(2)	(3)	(4)	(5)	(6)
Officials/ Managers	373.3	-1.667	0.14	2.0	98.0
Professionals/ Technicians	-366.5	-5.494	0.35	12.0	88.0
Sales Workers	-780.0	5.000	0.14	2.0	98.0
Office/ Clerical	429.0	-2.125	-0.08	6.2	93.8
Craft Workers	-110.2	1.345	0.70	49.4	50.6

Table 39
Regression Analysis between Black and White Employment, by Job Category, U. S. Summary, 1969-74

Job Category	Regression		Correlation Coefficient	Percent Variation	
	Constant	Coefficient		Explained (4) x (4) x 100	Unexplained 100 - (5)
(1)	(2)	(3)	(4)	(5)	(6)
Officials/ Managers	-121.2	0.066	0.98	97.2	2.8
Professionals/ Technicians	-142.8	0.083	0.81	66.2	33.8
Sales Workers	-30.3	0.060	0.77	59.6	40.4
Office/ Clerical	-372.2	0.164	0.54	29.8	70.2
Craft Workers	-699.4	0.255	0.97	94.8	5.2
Total, All EEO-1 Jobs	-1,992.1	0.193	0.90	81.5	18.5

Table 40
Regression Analysis between the Changes in
Black and White Employment, by Job Category,
U. S. Summary, 1969-74

Job Category	Regression		Correlation Coefficient	Percent Variation	
	Constant	Coefficient		Explained (4) x (4) x 100	Unexplained 100 - (5)
(1)	(2)	(3)	(4)	(5)	(6)
Officials/ Managers	9.1	0.019	0.66	44.2	55.8
Professionals/ Technicians	11.6	0.036	0.68	46.9	53.1
Sales Workers	14.9	0.010	0.43	18.2	81.8
Office/ Clerical	37.4	-0.040	-0.56	31.6	68.4
Craft Workers	11.0	0.167	0.83	68.9	31.1
Total, All EEO-1 Jobs	163.9	0.040	0.20	3.8	96.2

Table 41
Actual and Fair-share Employment levels and Numbers of Persons with Required Years of Schooling (Total Selected Job Categories, except Pro/Tech)
12 years to 15 years of schooling completed
(Levels in Thousands)

	Employment Level		Level of Employment Gap (3) - (2)	Persons with Required Years of Schooling		
	Actual	Fair-share		Total Number	Difference between Total Number and Actual Employment	
					Number (5)-(2)	Ratio of Difference to Gap (6) ÷ (4)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1969	632	1,411	780	4,024	3,392	4.4
1970	726	1,394	668	4,470	3,744	5.6
1971	748	1,568	820	4,710	3,962	4.9
1972	884	1,702	818	4,960	4,076	5.0
1973	999	1,752	753	5,386	4,387	5.9
1974	1,068	1,771	703	5,154	4,686	6.7

Source: Equal Employment Opportunity Reports and Current Population Survey.
Individual entries may not sum to totals due to rounding.

Table 42
Actual and Fair-share Employment Levels and Numbers of Persons with Required Years of Schooling (Professional and Technical Job Categories)
16 or More Years of Schooling Completed
(Levels in Thousands)

	Employment Level		Level of Employment Gap (3) - (2)	Persons with Required Years of Schooling		
				Total Number	Difference between Total Number and Actual Employment	
	Actual	Fair-share			Number (5)-(2)	Ratio of Difference to Gap (6) ÷ (4)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1969	119	365	246	503	384	1.5
1970	141	382	241	513	372	1.5
1971	152	405	253	533	381	1.5
1972	178	469	291	601	423	1.4
1973	204	505	301	721	517	1.7
1974	188	430	242	705	517	2.1

Source: Equal Employment Opportunity Reports and Current Population Survey.
Individual entries may not sum to totals due to rounding.

Table 43
Projected Number of Years Required to Achieve Fair-Share
Employment Position
Base: 1969-1974

Employment Level

Dependent Variable Employment Level	Employment Position			Required Future Years
	Annual Change	Current Actual Level	Fair-Share	
(1)	(2)	(3)	(4)	(5)
Officials/Managers	12,800	99,000	368,000	21
Professional/ Technicians	14,000	188,000	429,000	17
Sales Workers	16,000	180,000	348,000	10
Office/Clerical	35,000	479,000	578,000	9
Craft Worker	22,800	308,000	472,000	8

Table 44
Projected Number of Years Required to
Achieve Fair-share Employment Position
Base: 1969-1974

Participation Rate

Dependent Variable Participation Rate	Employment Position			Required Future Years
	Annual Change	Current Actual Rate	Fair-Share	
(1)	(2)	(3)	(4)	(5)
Officials/Managers	0.280	2.9	10.7	28
Professional/ Technicians	0.271	4.7	10.7	22
Sales Workers	0.280	5.5	10.7	20
Office/Clerical	0.488	8.8	10.7	4
Craft Workers	0.380	7.0	10.7	10

Table 45
Projected Number of Years Required to
Achieve Fair-share Employment Position
Base: 1969-1974

Percent Employment Gap

Dependent Variable Percent Employment Gap	Employment Position			Required Future Years
	Annual Change	Current Actual	Fair-Share	
(1)	(2)	(3)	(4)	(5)
Officials/Managers	-0.180	7.8	0	43
Professional/ Technicians	-0.171	6.0	0	35
Sales Workers	-0.180	5.2	0	30
Office/Clerical	-0.388	1.9	0	5
Craft Workers	-0.280	3.7	0	14

Appendix II

Glossary of Terms

Actual employment: the number of persons during the reference period of the survey year for whom Social Security taxes are withheld. In addition to totals, such employment is also reported by job category and minority group. (See fair-share employment.)

Actual wage bill: the product of actual employment and dollar earnings of those employed. As such, it represents the dollar earnings received by all employed and when the cost of fringe benefits are added represents the labor costs to the employer. In the subject study the actual wage bill of minorities/women, B_1, is given by $B_1 = W_1 \times E_1$, where W_1 and E_1 are the median wages and actual employment level of minorities/women. (See expected wage bill.)

Civilian labor force: the number of persons not in full-time military work status who are either employed or unemployed and actively seeking employment. Unlike actual employment from the EEO reports, the civilian labor force concept counts employment according to major occupation or industry, thus discounting the secondary effect of dual job holders. (See actual employment and fair-share employment.)

Earnings: represent the dollar amount of wages and salaries paid to an employee by an employer. Unlike income, earnings do not include interest or dividend payments, or pensions and other transfer payments. Earnings reported in the Census or CPS do include bonuses and commissions, however. Because of the skewness of the earnings distributions, Census tabulations of central tendency are measured by the median.

Employment availability: the number of persons in the population between the ages of 16 and 65 (i.e., prime working ages). Unlike the labor force concept which excludes persons without a job who are not actively seeking work, the concept of employment availability includes such persons, thereby representing a maximum potential level of labor supply. Since minority groups and blacks in particular, contain a significant number of "discouraged" workers who have ceased to look for work, the labor force concept underestimates the potential labor supply from

those groups. On the other hand, the concept of employment availability presents a more accurate picture of the potential labor supply of minority groups and women by discounting the absence of readily available employment demand, household responsibilities, etc. Employment availability can be measured as an absolute level or as a percentage or rate between one particular minority group and the total population. (See civilian labor force.)

Employment gap: the difference between fair-share employment and actual employment for any given minority group or for women. The gap can be measured as an absolute level or as a percentage but its value, for all practical purposes, must be greater than or equal to zero. (See fair-share employment and actual employment.)

Expected wage bill: the wage bill which pertains to a situation of fair-share employment and equal wages among population groups. (See actual wage bill.)

Fair-share employment: the number of minority persons employed at a rate equal to their employment availability. Thus, fair-share employment, FS_M, is the product of the employment availability, P_M, rate of a particular minority group and the actual employment level of all population groups, E.

$$FS_M = P_M \times E$$

(See employment gap.)

Gap closure: a concept indicating the length of time required for actual employment of any minority group to be equal to their fair-share employment. In the subject model, gap closure may be estimated upon the basis of regression analysis and selected target employment position.

Index of occupational gap: a percent estimate indicating, for any given minority group, the difference between their occupational distribution and that of whites. As such, this index represents the degree to which the quality of minority employment differs from whites. Generally speaking, the index of occupational gap, Io, is one less the ratio of minority occupational distribution, O_M, to the occupational distribution of whites, O_W, multiplied by 100:

$$Io = \left[1 - \frac{OM}{OW} \right] \times 100:$$

(See occupational distribution.)

Index of wage gap: a percent estimate indicating, for any given minority group, the difference between their wage distribution and that of whites. As such, this index represents the degree to which the wages of minority/female employment differs from whites/males. As estimated in the subject model, this index, I_w, is the percent difference between the median earnings of whites/men and minorities/women, Wo - Wi, to the median earnings of whites/men, Wo:

$$Iw = \frac{Wo - Wi}{Wo} \times 100$$

Industrial classification: the grouping of employment and related data by the type of economic activity of the reporting employer. In the EEO-1 survey, industry classification is provided by the major industry groups (three digits), major groups (two digits) and divisions provided in the Standard Industrial Classification (SIC) system.

Job category: refers to any of the EEO-1 employment groups which specify work titles, assignments, and responsibilities. There are nine job categories, including: (1) officials and managers, (2) professionals, (3) technicians, (4) sales workers, (5) office and clerical workers, (6) craft workers, (7) operatives, (8) laborers, and (9) service workers.

Minority: as reported in the EEO-1 survey, indicates employment of any one of the following groups: (1) Black, (2) Oriental, (3) American Indian, and (4) Spanish Surnamed American. Employment is also reported by sex. The total of black males and females may occasionally be used as a proxy for other minority groups. This is done to help assure adequate employment levels in all job and industry survey cells and because blacks generally are the largest minority group in the population.

Occupational distribution: the ratio or percent of employment in a particular job category to total employment in all job categories. As such, it represents the quality of employment. In the subject model, the occupational distribution of minorities/women in any job category j is given by $O_{ij} = \frac{Eij}{Ei} \times 100$, where Eij and Ei represent respectively the actual employment level of minorities/women in the given occupational and total actual employment level of minorities/women. (See index of occupational gap.)

Participation rate: the ratio or percent of employment of a particular minority group to the employment of all population groups. It represents the quantity of minority employment. The participation rate is usually stated in terms of a particular job category. In the subject model, for instance, the participation rate of minorities/women, prj, in job j is given by $prj = \frac{Eij}{Ej} \times 100$, where Eij is minority/female employment in the occupation, while Ej is total employment in the occupation. (See occupational distribution and participation rate movement.)

Participation rate movement: the change either total over the time period under question or average in the participation rate. In the subject model, the average participation rate movement for minorities/women, prm, may be approximated by: $prm = \frac{pr\ (1974) - (1969)}{5}$, where pr (1974) and pr (1969) represent the penetration rate of the population group during 1974 and 1969, respectively. As such, it can show whether the employment position of minorities/women is improving or worsening relative to their fair share and the rate of the annual change. (See participation rate.)

Regression analysis: a statistical approach to the examination of the relationship of movements in two or more data series. As used in the subject study, regression analysis in the form of linear trend estimates was the basis for estimating the "strength" of the process of gap closure for minorities/women and the time required to achieve this gap closure.

Wage bill gap: the difference between the expected and actual wage bill. For blacks, other minority groups and women, it represents the wage loss due to the combined effects of substandard wages (i.e., wage effect) and employment levels below the fair-share level of employment (i.e., employment effect). In the subject model, the wage effect for minorities/women is the product of white median wages and the actual employment level of blacks. The employment effect, meanwhile, is the product of minority/female median wages and their fair-share employment level. (See expected wage bill, fair-share employment, and actual wage bill.)

Appendix III

REQUIREMENTS FOR FILING THE EMPLOYER INFORMATION REPORT (EEO-1)

The filing of Standard Form 100 is required by law of (a) all employers subject to Title VII of the Civil Rights Act of 1964, as amended by the Equal Employment Opportunity Act of 1972 with 100 or more employees excluding State and local governments, primary and secondary school systems, institutions of higher education, Indian tribes and tax-exempt private membership clubs other than labor organizations; (b) all employers subject to Title VII who have fewer than 100 employees if the company is owned or affiliated with another company, or there is centralized ownership, control or management (such as central control of personnel policies and labor relations) so that the group legally constitutes a single enterprise, and the entire enterprise employs a total of 100 or more employees; (c) all Federal contractors who (1) are not exempt as provided for by 41 CFR 60-1.5, (2) have 50 or more employees, (3) are prime contractors or a first-tier subcontractor, and have a contract, subcontract, or purchase order amounting to $50,000 or more; or (4) serve as a depository of Government funds in any amount or is a financial institution which is an issuing and paying agent for U. S. Savings Bonds and Notes.

Only those establishments located in the District of Columbia and the 50 States are required to submit Standard Form 100. No reports should be filed for establishments in Puerto Rico, the Virgin Islands or other American Protectorates.